

XXIII. *Descriptions of new species of Tenthredinidæ and Cynipidæ from Mexico.* By PETER CAMERON.

[Read September 3rd, 1884.]

THE following paper (describing fourteen new species) is supplementary to my work on the Hymenoptera of Central America in Messrs. Godman and Salvin's 'Biologia Centrali-Americana.' The principal fact recorded in it is the occurrence in Mexico of three distinctly northern genera of sawflies, namely, *Nematus*, *Euura*, and *Hemichroa*, genera which have not hitherto been recorded so far south. Among the *Cynipidæ* the genera *Aulax*, *Eucæla*, and *Megapelmus* are also new for the fauna.

I am much indebted to Herr Rogenhofer, of the Vienna Museum, for the opportunity of examining the Mexican Hymenoptera of the Museum under his charge.

TENTHREDINIDÆ.

Nematus mexicanus, n. s.

Livid testaceous; face, sides and apex of abdomen above, and legs, obscure livid yellow; antennæ, metanotum, and back of abdomen, except at apex, apex of hind tibiæ and tarsi, black; anterior tibiæ inclining to fuscous. Wings clear hyaline; costa and stigma whitish yellow. Antennæ shorter than the abdomen, almost glabrous; 3rd joint a little shorter than 4th. Vertex raised in centre; frontal area a deep wide depression; antennal fovea large, longer than wide. Clypeus deeply incised; palpi fuscous. Wings longish; 2nd cubital cellule double the length of 3rd, not angled where the recurrent nervures are received; 3rd cellule a little widened at apex; the 2nd recurrent nervure received a little in front of 3rd transverse cubital. Abdomen longer than the head and thorax together, narrowed towards the apex; its last segment largely developed above; cerci long; ovipositor long, nearly half the length of the abdomen; the sheath at apex pilose. Blotch small; cerci large, white; claws bifid, spurs shortish. The vertex and mesonotum are very finely punctured; on the middle lobe of

the latter is a central furrow; the extreme apex of the scutellum is black, and there is a narrow obscure black line down its centre. Length, 7 mm.

Closely allied to the European *N. hæmorrhoidalis*, Spin., and to the North American *N. chloreus*, Norton. The occurrence of a *Nematus* so far south is of much interest, this being the first record of that northern genus in Central America.

Hab. Northern Sonora, Mexico (*Morrison*).

Euura mexicana, n. s.

Luteous; the vertex broadly, the head entirely behind, the middle lobe of the mesonotum, except at the apex, the lateral, except at the sides, the scutellum, except at the apex, breast, mesopleura behind, metapleura, metanotum, and basal third of abdomen, black, the black passing into brown at its junction with the luteous. Scape of antennæ and the basal joints of flagellum black, the rest fulvous; they are as long as the abdomen, and have the 3rd joint shorter than the 4th, and are covered with a close pubescence. Lateral sutures on vertex deep, and there is a broad transverse one behind the ocelli. Front projecting, a hollow between it and the eyes; at its top in the centre is a fovea, and it is separated from the vertex by a curved depression. Clypeus incised. The legs are paler coloured than the body; the coxæ are black at the base; the apices of the tarsal joints are fuscous; claws bifid. The cerci are nearly as long as the metatarsus, pallid yellow. Wings hyaline; costa pallid; stigma fuscous, whitish at the base. Apical half of sheath of ovipositor black; claws bifid. Length, 5.5 mm.

Hab. Northern Sonora, Mexico (*Morrison*).

This comes very near *E. ovum*, Walsh.

Hemichroa nigricans, n. s.

Black, shining; tegulæ, pronotum at base, apex of femora (anterior broadly), apex of coxæ, trochanters, tibiæ, and tarsi, white; apex of hind tibiæ and tarsi black. Front finely punctured; face covered with a white longish pubescence; frontal area clearly defined; there is a broad transverse furrow behind the ocelli, and a short longitudinal one issues from its centre to the back of the head; lateral sutures indistinct; clypeus broadly incised. Wings hyaline; costa fuscous; stigma livid; the 1st radial cellule much shorter than 2nd; the transverse radial nervure is received a little

past the 2nd transverse cubital; the 2nd cubital cellule has a horny point; 3rd cubital cellule longer than broad, of nearly equal breadth throughout; 2nd recurrent nervure almost interstitial. Abdomen stout, broad at apex, not very much longer than the head and thorax together; its apex above is dull white; cerci short, thick, fuscous. Long. 6.5 mm.

Hab. Mexico, Northern Sonora (*Morrison*).

Blennocampa bicolorata, n. s.

Black; pronotum, mesonotum (except scutellum), and tegulæ, blood-red; clypeus and labrum dull white. Mandibles piceous. Antennæ about as long as the abdomen, thickish, covered with a dense stiff pubescence; 3rd joint nearly one-half longer than 4th; lateral sutures on vertex deep and broad behind, shallow in front of ocelli; frontal area not defined, but there is a shallow fovea down from the front ocellus. Clypeus transverse; first radial cellule the longest; transverse radial nervure straight and received in the apical third of the 3rd cubital cellule, which is long, and receives the recurrent nervure not far from its base; the transverse median nervure is received before the middle of the cellule. The wings are dark fuscous. Claws apparently simple. Length, nearly 5 mm.

This species is most nearly related to *B. inhabilis*, Harris *sec.* Norton, but that has the antennæ shorter; the abdomen is also shorter, it being "short, nearly as wide as long"; while in *B. bicolorata* it is distinctly longer than wide. The mesopleura is red in front, and the transverse radial nervure is bent and received near the 3rd transverse cubital.

Hab. Chapulte and Orizaba, Mexico (*Bilimik*); Mus. Vienna.

Strongylogaster Rogenhoferi, n. s.

Abdomen and legs rufo-testaceous. Head black clypeus, labrum, mandibles, and palpi white. Antennæ black; the basal joint and the apex of 4th to the 7th white. Thorax black; the edges of the middle lobe of mesonotum, scutellum, tegulæ, pronotum, and the pleuræ, except a small black mark below the tegulæ, an oblique one on the mesopleura, and a mark over the middle coxæ, white. The antennæ are nearly as long as the thorax and abdomen together, but slightly thickened beyond the middle; the 3rd joint a little longer than 4th. Sutures on vertex flat and shallow; frontal area not defined; the front ocellus is

situated in a hollow. Clypeus truncated at apex. Wings hyaline; stigma and costa livid testaceous. The transverse radial nervure is received in the apical third of the cellule; the 2nd cubital cellule is a very little longer than 3rd; the transverse median nervure is received near the middle; the 2nd recurrent in basal fourth of the 3rd cubital cellule. The coxæ and trochanters are paler than the rest of the legs. Claws bifid. Male. Length, 9 mm.

A very distinct species. I have named it after Custos Roggenhofer, of the Vienna Museum.

Hab. Orizaba, Mexico (*Bilimik*); Mus. Vienna.

Strongylogaster fumipennis, n. s.

Black; apex of clypeus, labrum, and a thin line on pronotum obscure white; anterior tibiæ and tarsi fuscous in front. Wings smoky; nervures and stigma black. Antennæ longer than the head and thorax together, not much thickened beyond the middle. Frontal area clearly defined, enclosing the lower ocellus; the apex rounded, the base projecting and narrowed between the two hind ocelli; the apex dilated, and from its sides a carina runs to the eyes. Clypeus transverse; 3rd cubital cellule distinctly longer than 2nd, the apex not very much dilated; 1st radial cellule much longer than 2nd; transverse basal nervure received past the middle of the cellule. Male. Length, 10 mm.

Closely allied to *S. nigredo*, Norton, but is larger, and differs otherwise in having the antennæ longer and not so much thickened at the apical half, in the mouth and a line on the pronotum being white, and in the 3rd cubital cellule being much longer than the 3rd; the 1st radial cellule being also longer compared to the 2nd, this not being the case with *nigredo*.

Hab. Mexico.

Ptilia crassula n. s.

Black, shining; labrum and mandibles piceous; pronotum broadly, tegulæ, tibiæ, and tarsi, white; the apex of hind tibiæ broadly, and hind tarsi, except at the base, black. Antennæ piceous, not much longer than the thorax; covered with a microscopic pile. Sutures on vertex broad and deep in front of the ocelli; front ocelli in a deep round pit. Front bluntly keeled between the antennæ. Wings clear hyaline; costa and stigma griseous-testaceous. The first three cubital cellules are together not much longer than the 4th; the 3rd is much broader than long;

the 2nd recurrent nervure is received in the 3rd cellule, but almost touching the 2nd transverse cubital nervure. Female. Length, nearly 6 mm.

Hab. Northern Sonora, Mexico (*Morrison*).

Ptilia nigerrima, n. s.

Black; the anterior tibiæ dirty white in front. Wings hyaline; nervures and stigma black. Antennæ a little longer than the abdomen, covered with long hair. Sutures on vertex broad and deep, and converging in front of the ocelli, shallow at the side of the ocelli, deep and broad behind them. The 1st recurrent nervure is received a little in front of the middle of the cellule; the 2nd is interstitial; 3rd cubital cellule a little broader than long. The body is broad and thick; the legs are covered with pale microscopic down, and the knees incline to piceous. Male. Length, 5 mm.

Hab. Northern Sonora, Mexico (*Morrison*).

Ptilia luteiventris, n. s.

Black; abdomen luteous; knees piceous; anterior tibiæ dirty white in front. Wings hyaline; nervures and stigma fusco-piceous. Antennæ not much longer than the thorax; covered with a microscopic pile. The three cubital cellules are together shorter than the 4th; the 1st recurrent nervure is received in the middle; the 2nd is interstitial; 3rd transverse cubital nervure bent outwardly; the 3rd cubital cellule broader than long. Female. Length, 5.5 mm.

Hab. Northern Sonora, Mexico (*Morrison*).

Obs. I have placed the above-described three species in *Ptilia*, as I have defined it in Biol. Cent. Amer., Hymen., p. 42, as the 2nd recurrent is received rather in the 3rd than in the 2nd cubital cellule; but these species illustrate the difficulty of using the neururation in generic definitions, for actually they are intermediate between *Ptilia* and *Diolocera*.

CYNIPIDÆ.

Aulax rufipes, n. s.

Black; the antennæ and legs (including the coxæ) red; scape somewhat infuscated; the abdomen at the base, the sides, and ventral surface, of a more obscure red than the legs; oral region and mandibles (except at the apex) piceous-red. Head with the vertex shining, finely punctured; the face opaque, more strongly

and closely punctured; the lower part at the base of the mandibles striated. The thorax opaque, closely rugose-punctate, except a smooth, shining, impunctate space on the mesopleura. The lateral furrows on mesonotum distinct; scutellar foveæ smooth and shining, longer than broad. Antennæ 13-jointed; 1st joint nearly double the length of the 2nd; 3rd distinctly longer than 4th; the last double the length of 12th, and a little thicker than it. Head and thorax closely covered with a pale pubescence; abdomen smooth and shining; 3rd segment (or 2nd after the petiole) long, almost concealing the others. Wings hyaline; nervures pallid fuscous; radial nervure rather broad; cubitus reaching to the apex of the wing, but rather faint. The male has the 3rd joint of the antennæ bent laterally and dilated at the apex, and the other joints are longer; the reddish colour extends laterally down from the eyes, and, if anything, the pubescence on the thorax is denser. Length, 2.5 mm.

Hab. Mexico (*Bilimik*); Mus. Vienna.

Cothonaspis rufiventris, n. s.

Black; abdomen at the base, at the sides, and on ventral surface, piceous-red. Antennæ longer than the body; scape smooth and shining; flagellum opaque, covered with a microscopic pile, and very faintly striated; 3rd joint longer than 4th; the last two subequal. Head and thorax smooth and shining, the latter very obscurely aciculated above; scutellar cup shallow, longer than broad, the base more sharply pointed than apex; the foveæ at base of scutellum obsolete. Wings hyaline, ciliated at apex; radial nervure closed, about one-half longer than broad; cubitus obsolete. Length, scarcely $1\frac{1}{2}$ mm.

This is a *Cothonaspis* as defined by Foerster. There is a slight trace of pilosity on the base of abdomen, but it certainly does not form a dense tuft like what we have in *Eucæla*.

Hab. Mexico (*Bilimik*); Mus. Vienna.

Eucæla incisa, n. s.

Black, opaque; the flagellum of antennæ to the 7th joint and legs piceous-red; the coxæ, except at apex, the middle of the femora broadly, and the apex of hind tibiæ and hind tarsi, black; the legs sparsely covered with white glistening hairs. Wings hyaline; nervures white; radial cellule closed at base, longer than broad; cubital nervure obsolete. Antennæ as long as the entire body and hind legs, when stretched out behind; 1st joint of scape

double the length of 2nd; 1st joint of flagellum a little longer than the 2nd; the joints taper a little in thickness towards the apex. Cup of scutellum oval, shallow, the edge piceous; foveæ at its base large, deep. Hair-fringe on abdomen griseous, of moderate size; the metanotum covered with longish white hair. The front of the pronotum is produced in the middle into a plate, which projects a little above the base of the mesonotum, is depressed in the centre, and is broader at the bottom than at the top. The sides are clearly margined and distinctly separated from the rest of the pronotum. The latter is, at the sides close to the head, covered with a dense tuft of griseous hair, and it has there a distinct margin. Clypeus rounded; mandibles piceous. Length 4 mm.

Hab. Mexico (*Bilimik*).

If Foerster's ideas of the limits of genera are to be carried out the above species should form the type of a new genus, owing to the peculiar structure of the prothorax. It comes, I think, nearest *Psilodora*. The peculiar form of the pronotum is only an extreme accentuation of what we have indications of in other species of *Euœclides*.

Megapelmus mexicanus, n. s.

Black; legs rufous; the coxæ at basal half, basal three-fourths of hind trochanters, and the four hind femora above and beneath, black. Wings hyaline; nervures blackish; radial cellule longer than broad. Antennæ longer than the body; the flagellum faintly fuscous on lower side at base; the 3rd joint a little longer than the 4th. Sutures on mesonotum shining, microscopically aciculate. Scutellum rather flat, but still raised in the centre; at the apex it has rather an abrupt slope, as has also the metathorax; the apex of the scutellum has a distinct border above, and this border goes also along the sides, but it is much more distinct at the apex, where it is elevated above the rest of the scutellum, which, in front of it, is depressed. The transverse carina in front of the scutellum is distinct. Petiole nearly one-half the length of the abdomen. The sides of the head and of the thorax covered with a longish white pubescence. Length, 4 mm.

Closely allied to the European *M. eucharoides*, Dalm., but differing in having the radial cellule narrower; the sutures on mesonotum not crenulated; scutellum longer and flatter and much more distinctly margined behind.

Hab. Mexico (*Bilimik*); Vienna Museum.

Ibalia ruficollis, n. s.

Black; the greater part of the pronotum, tegulæ, and abdomen red. Wings fuscous. Antennæ thin; the basal joint four times as long as the 2nd; the 3rd a little shorter than the 4th. Head rugose, the sides strongly striated; a carina runs from the outer ocelli to the base of the antennæ, forming a somewhat square area, having a keel in the centre, and from this central keel strong striations run obliquely to the sides. Mesonotum very strongly transversely striated, the sides and pronotum more finely and obliquely; at its junction with the mesothorax the pronotum is strongly margined, the margin projecting over the mesonotum, especially at the middle, which is indented; mesopleura hollowed, finely punctured. Scutellum transversely striated, like the mesonotum, its sides margined, the margin at the apex indented like the pronotum. In the centre of the metanotum is a shield-shaped area, longer than broad, smooth and shining, and with a straight keel in its centre; from this area some keels run obliquely down the sides. Over the hind coxæ is a broad tubercle, which ends in a moderately sharp point. Below the hind wings is a reddish mark, touching the suture of the mesopleura, which is smooth and shining opposite it. Petiole short, broader than long, smooth, shining. The 2nd segment of abdomen longer than 3rd, which is of the same length as 4th; the 5th a little longer; 6th on the upper side a little longer than the three preceding together. The head and thorax covered with a pale pubescence; legs with a longer and stiffer pile of the same colour. Length, nearly 12 mm.

The striations on the mesonotum are wide apart, and have the space between them smooth and shining. The lateral sutures of the mesonotum are deep, wide, smooth, and shining; the central becomes indistinct beyond the middle.

Hab. Pinos Altos, Chihuahua, Mexico (*Buchan-Hepburn*).